

Influence of Yoga-Based Professional Development on B.Ed. Trainee Teachers with special reference to N.K.T National College of Education for Women

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Abstract:

This study investigates the integration of yoga into Professional Development (PD) programs for trainee teachers in N.K.T. National college of Education for Women. Using a quasi-experimental design with two groups a Yogic Practice Group and a Control Group data was collected through the Perceived Stress Scale (PSS) and a Well-Being Questionnaire. An Analysis of Covariance (ANCOVA) was conducted, controlling for Baseline scores to assess differences in Outcome Evaluation stress levels. Results showed a statistically significant effect of yoga-based PD, with the Yogic Practice Group demonstrating lower adjusted stress scores than the Control Group. Findings underscore yoga's effectiveness in enhancing teacher resilience and well-being, suggesting the institutionalization of yoga-infused PD models in teacher education.

Keywords: Yoga, Professional Development, and Body.

Introduction:

Teacher education requires a delicate balance between pedagogical preparation and the holistic well-being of educators. Trainee teachers frequently experience stress arising from academic demands, time management pressures, and personal responsibilities. Prolonged stress not only hampers professional effectiveness but may also lead to burnout and attrition from the teaching profession. Globally, Professional Development (PD) programs are shifting toward holistic frameworks that emphasize teacher wellness alongside academic competence. Yet, most PD models continue to overlook the emotional and psychological needs of teachers, focusing instead on instructional strategies.

Stress is a natural aspect of life. Life is a dynamic process that is demanding and always changing. Acute stress causes our body to release substances. This is referred to as the body's fight-or-flight reaction, which is triggered by adrenaline and other stress hormones. It includes physiological changes like elevated blood pressure (BP) and rapid breathing, tense muscles, increased blood sugar, dry mouth and dilated pupils.

Stated differently, stress is the condition of elevated alertness required for an organism to protect itself under a threat. In addition to adrenaline, other chemicals that alter hormones in the body include human growth hormone and testosterone. Stress might be good for you up to a point.

Yoga helps to promote psychosomatic health and give peace to the mind. It works well as a vaccine to prevent psychosomatic illnesses and mental stress. Our mind and body have a close relationship and are always influencing one other. Dhyana and Asanas have an impact on our bodies and minds. Yoga has the potential to offer enormous benefits, including the alleviation of stress and the production of positive results.

Yoga offers a multidimensional pathway to address this gap. By combining physical postures, controlled breathing, mindfulness, and self-reflection, yoga promotes mental resilience, stress reduction, and enhanced emotional regulation. Yoga practices such as Pranayama, Bhujangasana, Tadasana, Shankha Mudra, Makarasana etc have proven to reduce the stress levels. Scientific evidence confirms yoga's benefits across diverse populations, including teachers and students, highlighting its potential for structured inclusion in PD programs. This study evaluates the impact of an eight week yoga-based professional development intervention on B.Ed. trainee-teachers' stress and well-being.

Objective Of The Study

To investigate the impact of yoga-based professional development on B.Ed. Trainee Teachers.

Review of Related Literature

Patel et al. (2024) reported reduced teacher stress during COVID-19 through online yoga interventions.

Metri et al. (2023) demonstrated that workplace yoga improved mental health, reduced musculoskeletal pain, and enhanced sleep quality among female teachers.

Telles et al. (2019) The teachers participated in residential yoga programs showed increased mental well-being and reduced anxiety.

These findings collectively strengthen the case for yoga-based PD as a sustainable model for teacher education institutions

Methodology

Forty B.Ed. Teachers Trainees from N.K.T. National College of Education for Women, Triplicane, Chennai, between the ages of 22 and 25, were chosen at random to serve as subjects in order to accomplish the goals of the random group experimental study. Each participant willingly agreed to participate in the study by signing an Informed Consent Form. To achieve the purpose of the study, the subjects are randomly selected and divided into two groups. There are 20 subjects each in Control group and Experimental group. For eight weeks, experimental group I participated in 30-minute yoga and mindfulness sessions five days a week. The second control group received active rest instead of any training.

The Measures used were:

1. Perceived Stress Scale (PSS)
2. Well-Being Questionnaire

Both instruments were administered at Baseline and Outcome Evaluation.

A quasi-experimental design was employed, and data were analysed using ANCOVA to adjust for baseline (Baseline) differences.

Results and Discussions:

ANCOVA Findings:

Group Effect: $F(1,37) = 35.4$, $p < 0.001$

Baseline Covariate: $F(1,37) = 1.06$, $p = 0.31$ (not significant)

This indicates that Outcome Evaluation stress levels were significantly lower in the Yogic Practice Group, even after controlling for baseline differences.

TABLE-I

Baseline and Outcome Evaluation Means of Yogic Practice Group and Control Group on Stress Life Event

Criterion Variables	Baseline Mean	Outcome Mean	Evaluation
Yogic Practice Group	18.7	13.9	
Control Group	19.2	17.9	

Table I shows the Baseline mean and Outcome Evaluation mean of the stressful life event of both groups. It was determined that the Group 1 – Yogic Practice group showed an improvement in the performance of stressful life events while the Controlled group had no significant improvement.

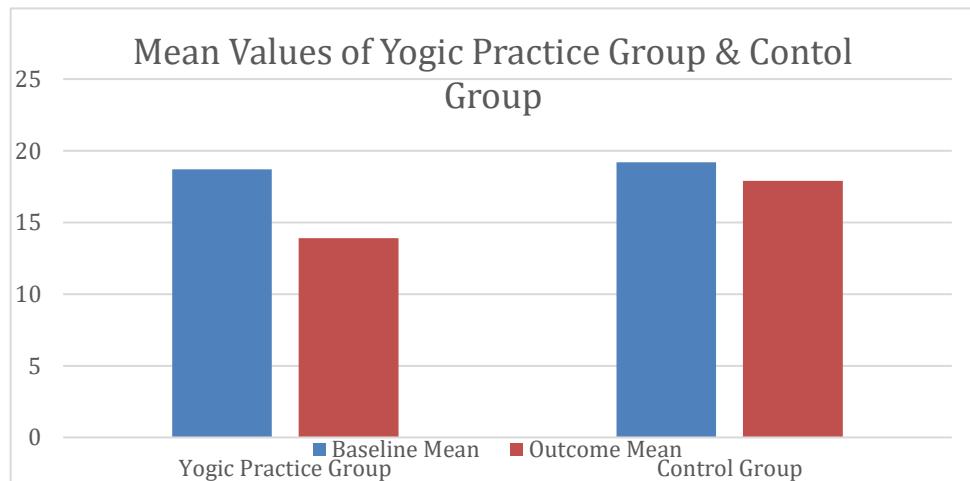


Figure I

The analysis of Covariance of stressful life event of Yogic Practice group and Control Group has been analysed and presented below:

Table-II: ANACOVA on Experiential set and Control Set on Stressful Life Event

Criterion Variable	Adjusted Outcome Evaluation Means		Sum of Squares	df	Mean Squares	F Ratio
	Group I (Yogic Practice)	Group II (Control)				
Stressful Life Event	14.2	17.8	127.1	1	127.1	35.4
			132.8	37	3.5	

From the above table, the obtained 'F' ratio value for a stress filled life event, for adjusted Outcome evaluation means were greater than table value 4.11 for df 1 and 37 and significant at 0.05 level of confidence. This study shows the notable variations between the experimental group and the control group adjusted Outcome Evaluation mean, regarding the emergence of stressful life events.

Discussion:

The ANCOVA analysis strengthens the evidence that yoga-based PD significantly reduces stress among trainee teachers. The non-significant effect of Baseline scores suggests that initial differences between groups did not influence the outcomes, thereby validating the intervention's impact.

The results are consistent with previous research, affirming that yoga improves resilience, enhances emotional well-being, and fosters reflective practice in teacher trainees. Furthermore, the slight differences between raw and adjusted means demonstrate the reliability of findings and support the broader applicability of yoga in educational contexts.

Conclusion:

Yoga-based PD interventions are highly effective in reducing stress and enhancing well-being in trainee teachers. By controlling for baseline variations through ANCOVA, this study provides robust evidence of yoga's impact. The integration of yoga into B.Ed. curricula offers a sustainable, low-cost, and culturally relevant strategy to prepare resilient, mindful, and

effective educators. Institutional support will be critical for scaling and sustaining such programs.

References:

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